

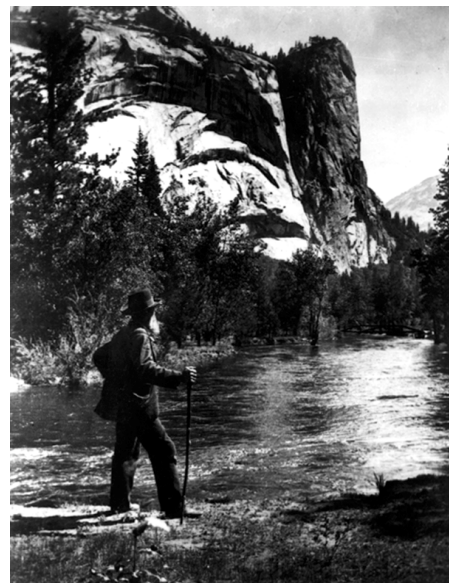
Purpose and Need

Background

The Merced Wild and Scenic River is as central to Yosemite National Park's identity as Half Dome or El Capitan. The river cuts its breathtaking course through glacial peaks, mountain lakes, alpine and subalpine meadows, waterfalls, and gorges and supports rich and diverse riparian habitat. Early visitors to Yosemite heralded the beauty of the Merced River and its surroundings.

The headwaters of the main stem and South Fork of the Merced River are largely within the boundaries of Yosemite National Park (see figure I-1). As a result, the upper watershed of the Merced River is free from the direct effects of municipal use, power production, and agriculture. Because of its largely "free-flowing" character and the protection afforded it in a national park, the Merced River and its tributaries continue to host a diverse array of plant and animal species. The Merced River also presents a valuable opportunity for scientific research and first-hand education about the unique ecological and hydrological processes associated with the river.

However, even the Merced River in Yosemite National Park has been altered by humans over time. Its banks have been stabilized to protect roads and other development; bridges span the river, restricting its ability to meander through the Yosemite Valley; and some adjacent wet meadows were once drained or filled for mosquito abatement and to make Yosemite Valley more suitable for grazing, farming, and camping. While there are no major dams on the Merced River in Yosemite National Park, diversions remain such as an old hydropower diversion dam on the main stem, and an impoundment in Wawona for the community's water supply. There are also several dams downstream from the Wild and Scenic portion of the river. Despite these changes, the Merced River remains largely free flowing, as it has been for thousands of years.



JOHN MUIR, 1872

Many a joyful stream is born in the Sierras, but no one can sing like the Merced. In childhood, high on the mountains, her silver thread is a moving melody; of sublime Yosemite she is the voice...



Photo by George Fiske, c. 1930, courtesy of Yosemite Museum

GALEN CLARK, 1907

...Of paramount importance in the care and preservation of Yosemite Valley is the protection of the banks of the Merced River as it runs its winding, crooked course through the length of the valley.

Protection and restoration of the Merced River will help ensure that generations to come will experience an unspoiled Yosemite National Park. Galen Clark, one of the first non-Indian settlers in the Yosemite area, recognized the important role of the river to Yosemite Valley.

Wild and Scenic River Designation

In 1987, the U.S. Congress designated the Merced a “Wild and Scenic River” to protect the river’s free-flowing condition and to protect and enhance its unique values for the benefit and enjoyment of present and future generations (16 United States Code [USC] 1271). This designation gives the Merced River special protection under the Wild and Scenic Rivers Act and requires the managing agencies to prepare a comprehensive management plan for the river and its immediate environment.

The passage of Public Law 100-149 on November 2, 1987 and Public Law 102-432 on October 23, 1992 placed 122 miles of the main stem and South Fork of the Merced River, including the forks of Red Peak, Merced

Peak, Triple Peak, and Lyell into the Wild and Scenic River System. The National Park Service manages 81 miles of the Merced River, encompassing both the main stem and the South Fork in Yosemite National Park and the El Portal Administrative Site. The U.S. Forest Service and the Bureau of Land Management administer the remaining 41 miles of the designated river.



NPS Photo

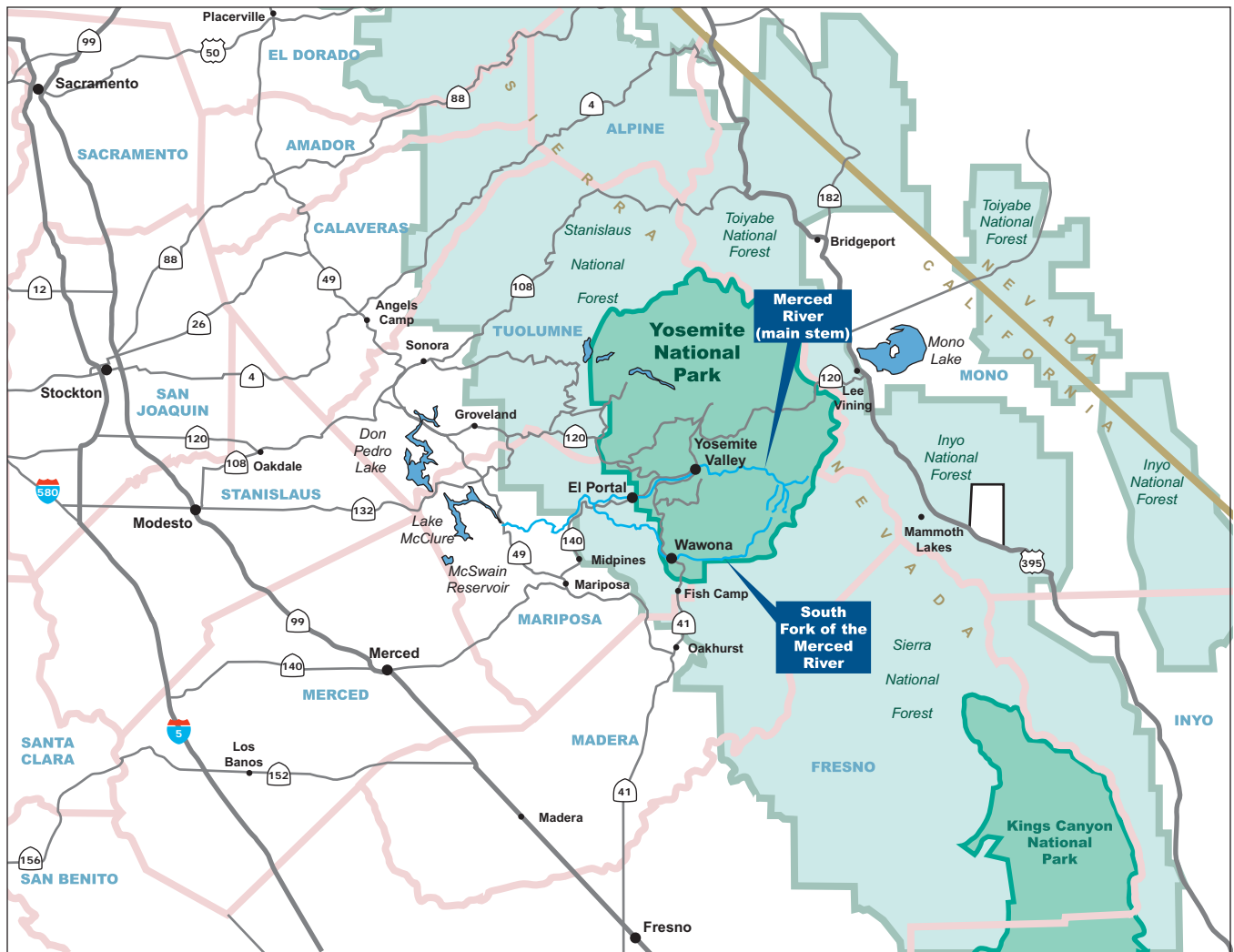
HIGH WATER

Four times in the last century the Merced River has risen above its banks to an extent similar to that of January 1997.

Recent Events

In January 1997, a major flood caused extensive damage to human-made structures along the main stem of the Merced River. Many facilities in Yosemite Valley were flooded, including Lower River, Upper River, Lower Pines, North Pines, and Group Campgrounds; motel and cabin units at Yosemite Lodge; numerous trail and road bridges; and employee housing areas (NPS 1997s).

The El Portal Road and the main sewer line (under the road) connecting Yosemite Valley to the El Portal Wastewater Treatment Plant also sustained significant damage and required repair and rebuilding. Sections of the road collapsed as the river undercut rock slopes below the road; other segments were completely washed



Prepared for:
National Park Service
Department of the Interior



Prepared by:
MIG, Inc.
Environmental Science Associates
June 2000

**Figure I-1
Regional Map**

Merced Wild and Scenic River
Comprehensive Management Plan/FEIS

out (NPS 1997t). The National Park Service took this rebuilding process as an opportunity to upgrade and widen the road, which has historically been unsafe for travel, and particularly dangerous for bus travel. The accident rate for the El Portal Road has been double the rate of any other roadway in the park and nearly ten times higher for buses (Kimley-Horn 1985).

A lawsuit was brought against the National Park Service over the adequacy of the environmental assessment for the reconstruction of the El Portal Road. At the time of the road reconstruction, a comprehensive management plan for the National Park Service segment of the Merced Wild and Scenic River had been initiated, but not completed. The U.S. District Court determined that the absence of a river management plan hindered the National Park Service's ability to ensure that projects in the river corridor adequately protect the Merced Wild and Scenic River. The legal decision for the lawsuit required the National Park Service to complete a comprehensive management plan for the Merced Wild and Scenic River with July 2000 as the target date.

Organization of the Merced River Plan/FEIS

The Comprehensive Management Plan for the Merced Wild and Scenic River and its Final Environmental Impact Statement, which evaluates the potential impacts of the plan, are integrated in this document and will be referred to collectively as the *Merced River Plan/FEIS*. The contents of this document are as follows:

Chapter I: Purpose and Need

Following this background section, the first chapter includes a discussion of the project's purpose and need, planning context, overview of the planning process, issues and concerns, and management goals and objectives.

Chapter II: Alternatives

This chapter presents the five alternatives, including the No Action Alternative, under consideration by the National Park Service for the management of those portions of the Merced Wild and Scenic River within Yosemite National Park and the El Portal Administrative Site. All action alternatives are based on a management zoning system that is detailed in Chapter II. The alternatives vary in their delineation of the river corridor boundaries and in their application of management zones to the river corridor. A set of summary tables comparing the five alternatives is provided at the end of the chapter.

Chapter III: Affected Environment

This chapter provides an overview of the affected environment, or the existing condition of the river corridor and its surroundings. This chapter looks at the existing condition of natural resources, cultural resources, visitor experience, social resources, and park operations and facilities.

Chapter IV: Environmental Consequences

This chapter presents the analysis of the potential impacts of each alternative for the management of the Merced Wild and Scenic River. Supporting data are included as appendices.

The remaining chapters primarily provide reference information:

Chapter V: Consultation and Coordination

This chapter summarizes the public involvement process relied upon in preparing and reviewing this document. It also lists the government agencies and organizations that received the *Draft Merced River Plan/EIS*.

Chapter VI: List of Preparers

This chapter lists the names and qualifications of the persons who are primarily responsible for preparing the document.

Chapter VII: Glossary

This chapter defines the technical terms and acronyms used in this document.

Chapter VIII: Bibliography

This chapter lists the references cited in this document.

Purpose of and Need for the Project

Purpose of the Merced River Plan

The 1987 federal legislation that designated the Merced River as a Wild and Scenic River states that a management plan “shall assure that no development or use of park lands shall be undertaken that is inconsistent with the designation of such river segments” (16 USC 1274[a]). Furthermore, the 1968 Wild and Scenic Rivers Act states “Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area” (16 USC 1281[a]). The segments of the river managed by the National Park Service flow through wilderness lands, national park lands, and lands managed as part of the El Portal Administrative Site. The *Merced River Plan* is designed to address the special characteristics of these areas within the overall context of the Wild and Scenic Rivers Act.

The specific purpose of the *Merced River Plan* is to provide direction and guidance on how best to manage visitor use, development of lands and facilities, and resource protection within the river corridor. The National Park Service has developed a series of planning goals to guide management decision-making in these areas (see “Management Goals” section). Once completed, the *Merced River Plan* will be used as a template against which future project implementation plans are judged to determine whether such projects will protect and enhance the values for which the Merced River was designated Wild and Scenic. As a result, the *Merced River Plan* will provide general direction and guidance for future management decisions; it does not address the specific details of future projects.

Need for the Merced River Plan

By designating the Merced a Wild and Scenic River, Congress directed the National Park Service, as well as the U.S. Forest Service and the Bureau of Land Management, to develop comprehensive management plans for the river segments under their jurisdictions. The U.S. Forest Service and the Bureau of Land Management have completed plans for the river segments within their jurisdiction. The National Park Service will fulfill its requirement to prepare a comprehensive management plan for the Merced River corridor when the Record of Decision on the final plan is signed by the National Park Service Pacific West Regional Director.

Wild and Scenic Rivers Act

The following section describes the basic elements of the Wild and Scenic Rivers Act and indicates where in the *Merced River Plan/FEIS* each section is addressed. Appendix A provides the full text of the Wild and Scenic Rivers Act as it applies to the Merced Wild and Scenic River. Appendix B provides a legislative history of bills associated with designation and management of the Merced Wild and Scenic River.

**PRESERVED AND PROTECTED**

Future generations of visitors should be able to experience the river and environs as past generations.

intent of the Wild and Scenic Rivers Act. This section states that, “It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations” (16 USC 1271).

- This *Merced River Plan/FEIS* fulfills the National Park Service’s responsibility to comply with the mandates of the Wild and Scenic Rivers Act by protecting the free-flowing condition and the other values for which the river was designated.

Section 2: Composition of system and classification

Section 2 details the composition of the Wild and Scenic Rivers System and requirements for state-administered components. A river may be added to the National Wild and Scenic Rivers System either by an act of congress, or through the Secretary of the Interior upon application by the governor(s) of the state(s) involved with administering the river under the Wild and Scenic Rivers Act. Eligible river areas are defined as a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in Section 1 of the act.

Congress added the Merced River to the Wild and Scenic Rivers System in 1987, as detailed in Section 3(a) of the Wild and Scenic Rivers Act. The designation followed the recommendation of an eligibility study published in the Sierra National Forest 1986 Draft Forest Land and Resource Management Plan.

Classification

Section 2 also requires that the river be classified and administered as “wild,” “scenic,” or “recreational” river segments, based on the condition of the river corridor at the time of boundary designation. The classification of a river segment indicates the level of development on the shorelines, the level of development in the watershed, and the accessibility by road or trail. Classifications are defined in the act as follows:

Under the Wild and Scenic Rivers Act, designated rivers “shall be preserved in free-flowing condition, and...their immediate environments shall be protected for the benefit and enjoyment of present and future generations” (16 USC 1271). The specific requirements of the act are summarized by section.

Section 1: Congressional declaration of policy and purpose

Section 1 of the Wild and Scenic Rivers Act includes the congressional declaration of policy and purpose, which explains the

Wild river areas: Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted.

Scenic river areas: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

Recreational river areas: Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.



ABOVE NEVADA FALL BRIDGE

Wild segments of the river are generally inaccessible except by trail.

The National Park Service developed interim classifications for the Merced Wild and Scenic River in 1989 based on the 1986 eligibility study of the river. These classifications were refined and published in the 1996 *Draft Yosemite Valley Housing Plan* (see figure I-2).

- The *Merced River Plan/FEIS* proposes revisions to these classifications to segments of the river as detailed in the “Revised Boundaries and Classifications” section of Chapter II.

Section 3: Congressionally designated components, establishment of boundaries, classifications, and management plans

Section 3 of the Wild and Scenic Rivers Act lists the rivers congressionally designated as components of the National Wild and Scenic Rivers System and requires the administering agency to identify river corridor boundaries and prepare a comprehensive management plan. The Merced Wild and Scenic River is designated under Section 3(a)(62) and allowed to delineate boundaries and classifications through appropriate revisions to the *General Management Plan*. This section details the span of the river to be administered by the Secretary of the Interior and the Secretary of Agriculture and withdraws mining claims to federal lands within one-quarter-mile of the riverbank (see discussion of Section 9 for more detail on mining claims).

Section 3(b) requires the agency charged with administration of the Wild and Scenic River to establish boundaries and classifications for the river within one year from the date of designation. Boundaries shall include an average of not more than 320 acres of land per river mile, measured from the ordinary high water mark on both sides of the river. The National Park Service developed interim classifications for the Merced Wild and Scenic River in 1989 based on the 1986 eligibility study of the river. These classifications were refined and published in the 1996 *Draft Yosemite Valley Housing Plan* (see figure I-2).

- The *Merced River Plan* proposes revisions to these boundaries as detailed in the “Revised Boundaries and Classifications” section of Chapter II.

Section 3 requires that the federal agency charged with the administration of a Wild and Scenic River component prepare a comprehensive management plan to “provide for the protection of the river values.” It also requires that “the plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this act.”

- The National Park Service will fulfill its requirement to prepare a comprehensive management plan when the National Park Service Pacific West Regional Director signs the Record of Decision for this *Merced Wild and Scenic River Comprehensive Management Plan/Final Environmental Impact Statement*. This plan addresses resource protection, development of lands and facilities, and related issues through management zoning, a River Protection Overlay, and decision-making criteria and considerations. This plan addresses user capacities through the Visitor Experience and Resource Protection (VERP) framework, an adaptive management framework used by the National Park Service (see Chapter II).

Sections 4 and 5: Study rivers and requirements for study reports

Sections 4 and 5 of the Wild and Scenic Rivers Act list study rivers designated for possible inclusion in the Wild and Scenic River System, mandates the study of these rivers for possible inclusion, and details the requirements of the study reports under this process. Sections 4 and 5 are not applicable to the *Merced River Plan/FEIS*, since this plan addresses segments already included in the Wild and Scenic River System.

Section 6: Acquisition procedures and limitations

Acquisition procedures and limitations are outlined in Section 6 of the Wild and Scenic Rivers Act. The Secretary of the Interior is authorized to acquire lands and interests in lands within the authorized boundaries of the main stem and South Fork of the Merced River under Section 6(a), and to use condemnation to acquire easements on lands within the corridor when necessary. The vast majority of lands within the river corridor are owned in fee title by the United States. The National Park Service intends to work cooperatively with private landowners to ensure the protection and enhancement of Outstandingly Remarkable Values.



Photo by Chris T. Rio

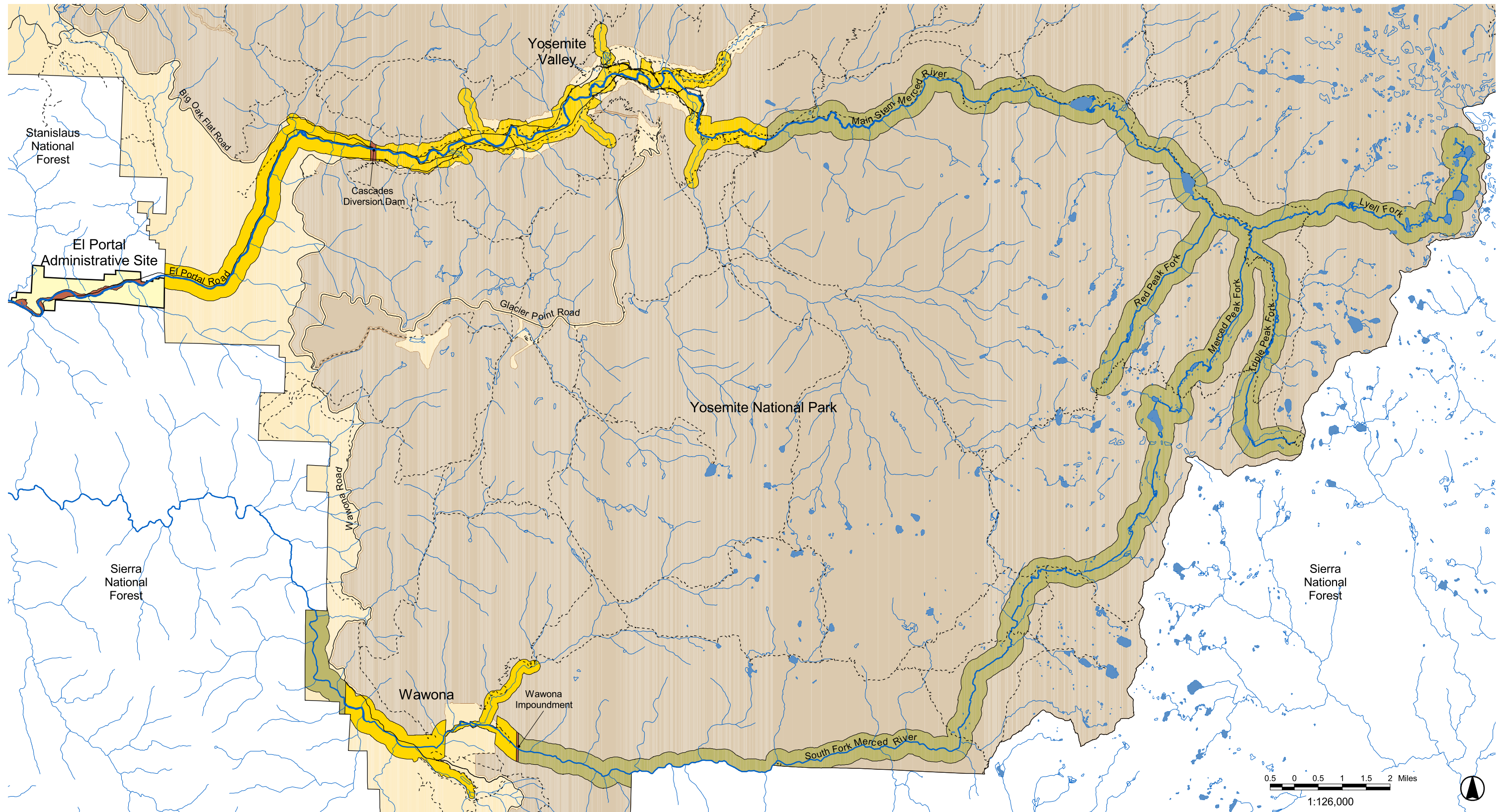
CASCADES DIVERSION DAM

All activities within the bed and banks of the river—including dams—require a Section 7 determination of effects to river values.

- Treatment of private lands under the *Merced River Plan/FEIS* is further detailed in Chapter II, under “Site-Specific Elements Common to All Action Alternatives.”

Section 7: Restrictions on hydro and water resources development projects

Section 7 is one of the most vital components of the Wild and Scenic Rivers Act. This provision directs federal agencies to protect the values of designated rivers from the adverse effects of “water resources projects” within the bed and banks of the river. The act states:



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National Park Service
Department of the Interior



Prepared by:
MIG, Inc.
Environmental Science Associates
June 2000

Segment Classifications



Wild
Scenic
Recreational



Non Wilderness
Potential Wilderness
Wilderness



Roads
Trails
Merced River and Forks
Tributaries
Lakes

Figure I-2

Existing Boundaries and Classifications

Merced Wild and Scenic River
Comprehensive Management Plan/FEIS

...no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation of a river as a component of the National Wild and Scenic Rivers System. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration, or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior or the Secretary of Agriculture, as the case may be, in writing of its intention so to do at least sixty days in advance, and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this act and would affect the component and the values to be protected by it under this act (Wild and Scenic Rivers Act: 16 USC 1278 [a]).

Section 7 of the Wild and Scenic Rivers Act (16 USC 1278) requires a rigorous process to ensure that proposed “water resources projects,” implemented or assisted by federal agencies within the bed and banks of designated rivers, do not have a “direct and adverse effect” on the values for which the river was designated. “Water resources projects” include non-FERC licensed projects such as dams, water diversions, fisheries habitat and watershed restoration, bridges and other roadway construction/reconstruction, bank stabilization, channelization, levees, boat ramps, and fishing piers that occur within the bed and banks of a designated Wild and Scenic River (IWSRCC 1999) and that affect the river’s free-flowing characteristics. These projects include the types of actions along the Merced Wild and Scenic River that could come up for decision, including those projects for which the purposes are to improve the free-flowing condition of the river.

The agency designated as “river manager” must complete a Section 7 determination to assess whether the project proposed, assisted, or permitted by a federal agency would directly and adversely affect the values for which the river was designated. Water resources projects that have a direct and adverse effect on the values of a designated river must either be redesigned and resubmitted for a subsequent Section 7 determination, abandoned, or may proceed following written notification of the Secretary of Interior and the United States Congress.

Emergency projects (such as repairing a broken sewer line in or near the river) may temporarily proceed without a Section 7 determination. However, a Section 7 determination must be completed in a timely manner upon completion of the project. Emergency water resources projects that are later determined to have a direct and adverse effect on the river values should be mitigated based on the findings of the Section 7 determination.

- The *Merced River Plan* addresses Section 7 in several ways. The “Decision-Making Criteria and Considerations” that serve as the management framework for applying the plan include a Section 7 determination process for water resources projects. The River Protection Overlay that

guides management of the riverbed and bank also incorporates the Section 7 determination process. These two sections prescribe how the National Park Service will comply with Section 7 of the Wild and Scenic Rivers Act in its implementation of the *Merced River Plan* (see Chapter II).

Section 8: Limitations to entry on public lands

Section 8 of the Wild and Scenic Rivers Act withdraws lands within the boundaries of Wild and Scenic Rivers from “public entry, sale, or disposition under the public land laws of the United States.” This section of the Wild and Scenic Rivers Act preempts public land laws (such as land transfer and homesteading laws) under which nonreserved public lands may be disposed of for private use. Yosemite National Park is by definition “reserved land.” Therefore, this provision is largely irrelevant to the Merced River, as much of the river corridor had previously been withdrawn from the operation of the public land laws by the various statutes that developed the national park. Similar reservations pertained to land in the El Portal Administrative Site which was reserved as National Forest Service land before being transferred to the National Park Service (72 Stat. 1772). The Bureau of Land Management, as the agency charged with administering such withdrawals, initiated the necessary administrative actions.

Section 9: Limitations on mineral entry and development on public lands

Section 9 of the Wild and Scenic Rivers Act regulates, and in certain cases restricts, mining and mineral leasing operations on lands within the corridor of Wild and Scenic Rivers. Subsections (a)(i) and (ii) of Section 9 allow river managing agencies to regulate existing mining operations within designated river corridors. Subsection (a)(iii) of Section 9, which applies only to wild river segments, prohibits the establishment of any new mining and mineral lease operations on federal lands constituting the bed or banks, or located within one-quarter mile of designated wild river segments. Section 9 went into effect in 1968. In 1992, Congress amended the legislation for the Merced Wild and Scenic River by adopting a provision that prohibited the establishment of any new mining or mineral leasing claims on federal lands constituting the bed or banks, or located within one-quarter mile of scenic and recreational segments of the main stem and South Fork of the Merced River. This legislation applied to segments of the Merced River managed by the National Park Service, Bureau of Land Management, and US Forest Service.

For those segments of the Merced River within the boundaries of Yosemite National Park, Section 9 of Wild and Scenic Rivers Act has had little impact because of pre-existing prohibitions on mining. The legislation creating Yosemite National Park, which was enacted in the late 1800s and early 1900s, prohibited the location of mining claims within the park. This legislation withdrew lands within the park from the public domain and reserved the lands for park and recreation purposes under *Sec. 13 Stat 325 (1864); 34 Stat. 831 (1906); and 41 Stat. 731 (1920)*. In 1976, the Mining in the Parks Act (16 USC Section 1901, *et seq.*) was passed. This statute invalidated all mining claims within units of the National Park System that were not properly recorded with the Secretary of the Interior before September 1977. Today, there are no existing mining claims within the Yosemite National Park portions of the Merced Wild and Scenic River.

The history of mining in the El Portal Administrative Site differs from that of the park itself. Lands within the Administrative Site were originally administered by the US Forest Service. While under US Forest Service jurisdiction, numerous mining claims were established in the El Portal area. It was not until the enactment of the El Portal Administrative Site legislation (16 USC Section 47-1 et seq.) in 1958 that the El Portal area was transferred to the National Park Service. Following transfer, the National Park Service acquired all of the previously existing mining claims. New mining claims were prohibited in the El Portal Administrative Site subsequent to the transfer of jurisdiction to the National Park Service (see Public Land Order No. 2136.25 Fed. Reg. 6210 [1960]). Today, there are no existing mining claims within the National Park Service-administered El Portal segment of the Merced River.

Section 10: Management direction

Section 10 sets forth the management direction for designated river segments and includes the following:

1. The Wild and Scenic Rivers Act shall be administered to protect and enhance Outstandingly Remarkable Values (ORVs). Uses that are consistent with this and do not substantially interfere with public enjoyment and use of these values should not be limited (16 USC 1281[a]).
 - The *Merced River Plan/FEIS* presents a range of alternatives for providing appropriate access while protecting ORVs. While some alternatives emphasize visitor use or resource protection and enhancement more than others, all alternatives ensure meeting the needs of access as well as the protection of ORVs (see Chapter II).
2. In administration of a Wild and Scenic River, “primary emphasis shall be given to protecting its aesthetic, scenic, historic, archeologic, and scientific features. Management plans may establish varying degrees of intensity for its protection and development, based on the special attributes of the area” (16 USC, 1281[a]).
 - The *Merced River Plan/FEIS* accomplishes this by applying management zoning and a River Protection Overlay to the Merced River corridor to direct higher-impact uses to areas able to withstand heavy use. By doing so, the plan is able to protect the aesthetic, scenic, historic, archeologic, and scientific features in the more sensitive areas of the corridor (see “Management Zones,” Chapter II).
3. The act states that Wild and Scenic River segments in the National Wilderness Preservation System are subject to both the Wild and Scenic Rivers Act and the Wilderness Act. Where the two conflict, the more restrictive regulation would apply (16 USC, 1281[b]).
 - The *Merced River Plan/FEIS* acknowledges both laws and is consistent with the federal Wilderness Act of 1964 (16 USC, Chapter 23) and the 1984 California Wilderness Act (PL



RICH COMMUNITIES OF LIFE

Riparian habitats along the South Fork are considered biological ORVs for Wawona.

- 98-425) in the classification and management zoning applied to wilderness segments of the river (see “Site-Specific Elements Common to All Action Alternatives,” Chapter II).
4. Wild and Scenic Rivers administered by the National Park Service shall become a part of the National Park System, and these lands would be subject to both the Wild and Scenic Rivers Act and the acts under which the National Park System is administered. Where the laws conflict, the more restrictive regulation would apply (16 USC, 1281[c]).
 - Segments of the Merced Wild and Scenic River administered by the National Park Service were part of the National Park System or the El Portal Administrative Site, which is under the jurisdiction of the National Park Service, prior to designation of the Merced Wild and Scenic River. The *Merced River Plan/FEIS* is consistent with both the Wild and Scenic Rivers Act and the National Park Service Organic Act, which calls for both the preservation of natural and cultural resources and provision of visitor access to national park lands.
 5. Section 10(e) of the Wild and Scenic Rivers Act enables administrating federal agencies to enter cooperative agreements with the state and local governments.
 - As recommended under the *Merced River Plan/FEIS* the National Park Service would work cooperatively with Mariposa County, the State of California, and others to ensure protection of the free-flowing condition of the river and the river’s Outstandingly Remarkable Values. Treatment of private lands under the *Merced River Plan/FEIS* is further detailed in Chapter II, under “Site-Specific Elements Common to All Action Alternatives.”

Section 11: Federal assistance to others

Under Section 11 of the Wild and Scenic Rivers Act, federal agencies are encouraged to work with states or their political subdivisions to use funds under the Land and Water Conservation Fund Act for state and local Wild and Scenic Rivers.

- Since the *Merced River Plan/FEIS* addresses segments of the Merced Wild and Scenic River under the jurisdiction of the National Park Service, this section does not apply.

Additionally, federal agencies should provide guidance to and cooperate with landowners, private organizations, individuals, and state and local agencies regarding the management of Wild and Scenic Rivers.

- The *Merced River Plan/FEIS* directs the National Park Service to work cooperatively with Mariposa County, the State of California, and others to ensure protection of the free-flowing condition of the river and the river’s Outstandingly Remarkable Values. Treatment of private lands under the *Merced River Plan/FEIS* is further detailed in Chapter II, under “Site-Specific Elements Common to All Action Alternatives.”

Section 12: Management policies

The National Park Service shall take management actions on lands under its jurisdiction adjacent to the designated river corridor that may be necessary to protect the river according to the purposes of the Wild and Scenic Rivers Act. The National Park Service should also work with states, other federal agencies, and entities with jurisdictions adjacent to the Wild and Scenic River corridor to ensure compliance with purposes under the act, particularly in regard to activities,

such as timber harvesting and road construction, which may occur outside of the corridor but affect the Outstandingly Remarkable Values of the Merced Wild and Scenic River.

- The majority of lands adjacent to the Merced Wild and Scenic River corridor are under the jurisdiction of the National Park Service. Some segments abut lands under the jurisdiction of the U.S. Forest Service or Bureau of Land Management. The National Park Service is working cooperatively with both agencies to ensure the protection of the Outstandingly Remarkable Values of the Merced Wild and Scenic River.

Section 13: Reservation of state and federal jurisdiction and responsibilities; access to and across Wild and Scenic Rivers

Section 13 states that the Wild and Scenic Rivers Act does not change the jurisdiction or responsibilities of states with respect to fish and wildlife, including permitting of hunting and fishing. The act also does not affect existing water rights, or rights of access with respect to navigable streams, tributaries, or rivers of a Wild and Scenic River System. The Secretary of the Interior may grant easements and rights-of-way upon, over, under, across, or through components of a Wild and Scenic River in accordance with the laws applicable to the National Park System (16 USC 1284).

- The *Merced River Plan/FEIS* is consistent with the provisions of Section 13. The plan does not limit existing rights to fishing, water withdrawal, or access. Hunting is not allowed on national park lands.

Section 14: Land donations

This section guides the charitable contribution of an easement from a private landowner to the United States. Any easements acquired in the Merced Wild and Scenic River corridor would follow the requirements of this section of the act.

Section 14A: Lease of federal lands

This section authorizes the Secretary of the Interior to lease federally owned land within the boundaries of the Merced River corridor, subject to restrictive covenants required to carry out the purposes of the Wild and Scenic Rivers Act.

Section 15: Exceptions for Alaska

Section 15 details exceptions for rivers in Alaska and is not relevant to the Merced Wild and Scenic River.



WHY IS FREE FLOW IMPORTANT TO A RIVER SYSTEM?

- *Free-flowing rivers disperse valuable nutrients in adjacent meadows and stream habitats during flood events.*
- *Aquatic species require varied habitat created by a dynamic river system.*
- *Constriction and hardening of river channels, such as with levees, riprap, and bridges, can alter the river's energy and natural course, causing it to erode its own banks and damage valuable habitat, particularly during flood events.*

Section 16: Definitions

This section provides definitions for the terms “river,” “free flowing,” and “scenic easement.” The use of these terms in the *Merced River Plan/FEIS* is consistent with the definitions provided in the act:

“River” means a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes.

“Free-flowing,” as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, riprapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the National Wild and Scenic Rivers System shall not automatically bar its consideration for such inclusion, provided that this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.

“Scenic easement” means the right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the Wild and Scenic Rivers System, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area, but such control shall not affect, without the owner’s consent, any regular use exercised prior to the acquisition of the easement. For any designated Wild and Scenic River, the appropriate Secretary shall treat the acquisition of fee title with the reservation of regular existing uses to the owner as a scenic easement for purposes of this act. Such an acquisition shall not constitute fee title ownership for purposes of Section 6(b).

Planning Context

The *Merced River Plan* would guide the long-term management of the Merced Wild and Scenic River within the boundaries of Yosemite National Park and the El Portal Administrative Site. However, the plan would not exist in a vacuum – it is one of many documents that together form a management framework for Yosemite National Park and adjacent lands. This section will describe the role of the *Merced River Plan* within the existing parkwide and regional planning framework and its relationship to other plans and legislation.



HISTORIC STEREOVIEW OF CATHEDRAL ROCKS, YOSEMITE VALLEY

“Meandering peacefully along, as though not cognizant of its place in the book of the world’s wonders, flows the Merced River, in its bosom reflecting the majesty of its surroundings.”

– Mary H. Wills

Relationship to Yosemite National Park Plans

Planning in Yosemite National Park takes two different forms: general management planning and implementation planning. General management plans are required for national parks by the National Park and Recreation Act of 1978.

The purpose of a general management plan is to set a “clearly defined direction for resource preservation and visitor use” (NPS 1998c). This provides general direction and policies to guide all planning and management in the park. The 1980 *General Management Plan* is the overall guiding document for planning in Yosemite National Park.

Implementation plans, which tier off of the *General Management Plan*, focus on “how to implement an activity or project needed to achieve a long-term goal” (NPS 1998c). Implementation plans may direct specific projects as well as ongoing management activities or programs, and provide a high level of detail and analysis. Examples of implementation plans (existing or in progress) in Yosemite National Park include the following:

- *Fire Management Plan* (1990): This implementation plan prescribes fire management guidelines and actions for Yosemite National Park, and must balance the need to allow natural processes to prevail with the need to protect human life and property. The *Fire Management Plan* is being revised to reflect new Department of the Interior fire policies. The plan is anticipated to be completed within the next few years.
- *Wilderness Management Plan* (1989): This implementation plan addresses wilderness areas in Yosemite National Park designated under the California Wilderness Act of 1984 and

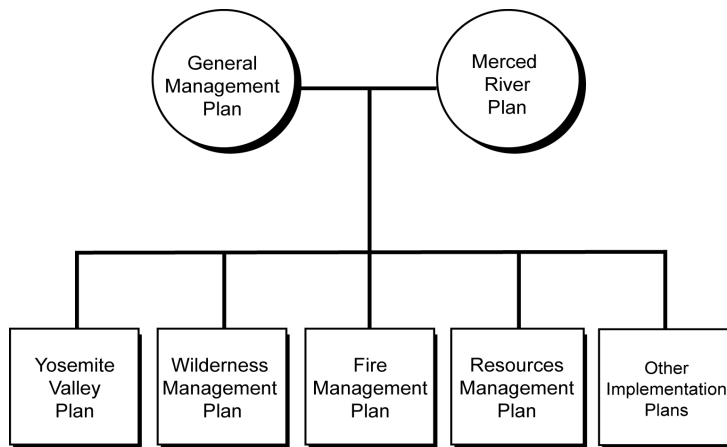
pursuant to the Wilderness Act of 1964. The objectives of this plan are to manage for a spectrum of high quality, diverse, but wilderness-appropriate experiences, while allowing natural processes to continue. The *Wilderness Management Plan* for Yosemite National Park will be updated from its 1989 version in the near future.

- *Resources Management Plan* (1993): This plan defines goals, objectives, issues, programs, and project statements for natural and cultural resource management within Yosemite National Park. Yosemite's plan will be updated within the next few years.
- *Yosemite Valley Plan* (in progress): This implementation plan provides for resource protection, restoration programs, visitor services and facilities, and park operations in Yosemite Valley. It also provides for the relocation of some facilities outside Yosemite Valley. The *Draft Yosemite Valley Plan/Supplemental Environmental Impact Statement* was released for public comment on April 7, 2000. The plan will be revised to reflect any changes in the *Merced River Plan/FEIS* where necessary.

The *Merced River Plan* will derive its direct authority from the 1968 Wild and Scenic Rivers Act, as amended, and therefore does not tier directly off the *General Management Plan* as do implementation plans. According to the Wild and Scenic Rivers Act, the river management plan “shall be coordinated with and may be incorporated into resource management planning for affected

adjacent Federal lands” (16 USC 1274). As such, the *Merced River Plan* is a companion document to the *General Management Plan*. The two plans complement each other and provide general management direction for the Merced Wild and Scenic River. Implementation plans affecting the Merced Wild and Scenic River will need to be consistent with the policies set by *both* the *General Management Plan* and the *Merced River Plan* (see figure I-3).

Figure I-3: *Relationship of Plans*



Relationship to Other Plans

The National Park Service's *Merced River Plan* is one of three plans that manage the designated 122 miles of the Merced Wild and Scenic River. The U.S. Forest Service and the Bureau of Land Management administer 41 miles of the main stem and South Fork of the Merced River as it travels through their jurisdictions downstream of the National Park Service segments. The Bureau of Land Management segments are managed under the 1991 *Merced Wild and Scenic River Management Plan* and the Forest Service segments are managed under the *South Fork and Merced Wild and Scenic River Implementation Plan*, also completed in 1991. While the National Park Service, U.S. Forest Service, and Bureau of Land Management plans address different

geographic areas, they all must protect and enhance the Outstandingly Remarkable Values of each segment of the Merced River corridor under the requirements of the Wild and Scenic Rivers Act.

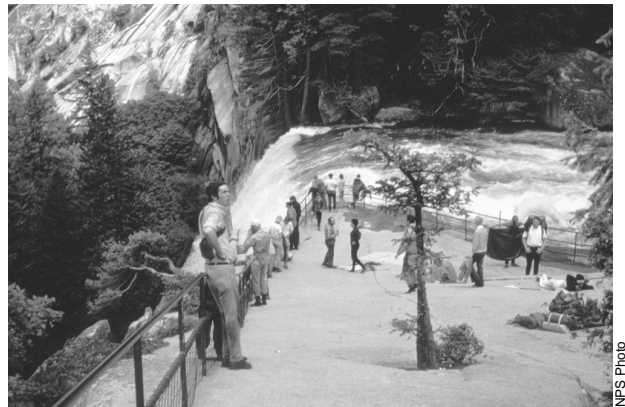
The 1991 *Wawona Town Planning Area Specific Plan* guides land uses in the town of Wawona, including a segment of the South Fork of the Merced River. The 1991 *Wawona Town Planning Area Specific Plan* is jointly approved by the National Park Service and Mariposa County and is a component of the Mariposa County General Plan. It is administered by the County Board of Supervisors. The action alternatives of the *Merced River Plan/FEIS* do not prescribe management activities for privately held lands (which occupy approximately one-third of Section 35 in Wawona), and the National Park Service does not exercise direct land-use authority over private lands. It is the intent of the National Park Service to work cooperatively with Mariposa County and with private property owners to ensure that the Outstandingly Remarkable Values of the river segment are protected and enhanced. The Wawona Town Plan is generally consistent with the Wild and Scenic Rivers Act. For example, the Wawona Town Plan prohibits new development within the Floodplain District Zone.

Legal Framework

The *Merced River Plan/FEIS* is written within a complex legal framework. The plan must not only comply with requirements of the Wild and Scenic Rivers Act, it must do so within the parameters of other legislation (see Appendix A) that governs land use within the river corridor.

National Park Service Organic Act

In 1916, this act established the National Park Service in order to “promote and regulate the use of parks...” and defined the purpose of the national parks as “to conserve the scenery and natural and historic objects and wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” This law provides overall guidance for the management of Yosemite National Park.



TOP OF VERNAL FALL

The National Park Service mission is to preserve park resources and to provide for the enjoyment of present and future generations.

Yosemite National Park Enabling Legislation

Three separate legislative acts form the enabling statutes for the current Yosemite National Park. On June 30, 1864, Congress granted to the State of California the Yosemite Valley and Mariposa Big Trees Grove to “be held for public use, resort, and recreation.” On October 1, 1890, Congress set aside Yosemite National Park as a “forest reservation” to preserve the “curiosities” and

“wonders” in their natural condition. In 1906, the State of California granted the Mariposa Big Trees Grove and Yosemite Valley back to the federal government.

Wilderness Act

A large segment of the Merced Wild and Scenic River flows through designated Wilderness areas. The Wilderness Act of 1964 and the California Wilderness Act of 1984 provide guidance for management within designated Wilderness. The purpose of the Wilderness Act of 1964 is to secure the benefits of an enduring resource of wilderness for present and future generations. Wilderness is defined in the act as an area managed to preserve its natural conditions, which is affected primarily by the forces of nature, and which has outstanding opportunities for solitude and an unconfined type of recreation (P.L. 88-577). These goals complement the intent of the Wild and Scenic Rivers Act as it applies to the areas of the Merced River corridor designated as “wild.” The California Wilderness Act established 704,624 acres of designated Wilderness and 927 acres of potential wilderness additions within Yosemite National Park (NPS 1989b). Most of the Merced River in Yosemite National Park flows through designated Wilderness areas. Wilderness areas in Yosemite are managed under the 1989 *Wilderness Management Plan*. The *Merced River Plan*’s management approach to wilderness will be consistent with the *Wilderness Management Plan*.

El Portal Administrative Site Enabling Legislation

In 1958, Congress passed legislation for the Secretary of the Interior to provide an administrative site for Yosemite National Park in the El Portal area (16 USC 47-1). This land is under National Park Service jurisdiction, but is not included as part of Yosemite National Park. The purpose of this act is to:

...set forth an administrative site in the El Portal area adjacent to Yosemite National Park, in order that utilities, facilities, and services required in the operation and administration of Yosemite National Park may be located on such site outside the park.



UTILITIES, FACILITIES, AND SERVICES

Congress set aside the El Portal Administrative Site in order to move park operational and administrative facilities outside of Yosemite National Park.

Since the Merced Wild and Scenic River runs through the El Portal Administrative Site, the *Merced River Plan* will provide a management framework for the river segments in El Portal. The management framework under each of the action alternatives was designed to protect and enhance the Outstandingly Remarkable Values of this segment of the river while allowing varying degrees of continued administrative use in El Portal.

Land Exchange, El Portal Administrative Site

In November 1998, Congress authorized the exchange of an approximately eight-acre parcel of land that is part of the El Portal Administrative Site for an 8-acre, privately owned parcel at the park boundary (for possible use as a park entrance station). The exchange will occur if the private property, known as the Yosemite View Parcel, is transferred to the Department of the Interior and after environmental compliance is completed (16 USC 47-1). Upon completion of the land exchange, the El Portal Administrative Site boundary would be adjusted to reflect the change. Both parcels are within the Wild and Scenic River corridor. For purposes of the *Merced River Plan/FEIS*, each of the action alternatives addresses the land exchange parcel in the same way. Additional environmental review and compliance would be necessary prior to the exchange moving forward.



Photo by George Fiske, 1890, courtesy of Yosemite Museum

EARLY EL PORTAL

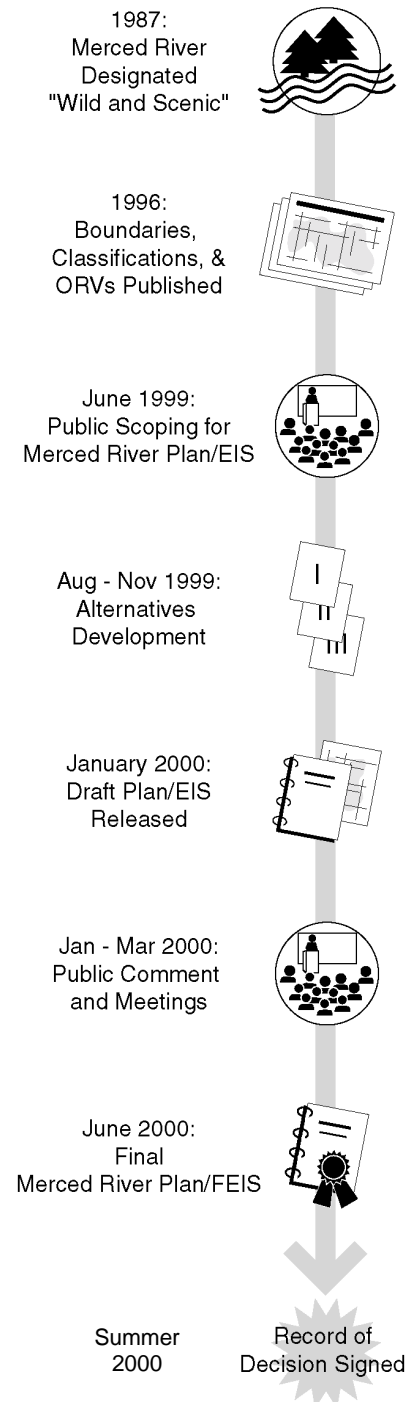
James Hennessey, the first Euro-American settler in El Portal, established a farm south of the Merced River in 1873, where the Trailer Village and Abbieville housing are presently located. Long before Euro-American development, however, American Indian people lived in El Portal and the surrounding area.

Overview of the Planning Process

The planning process for the *Merced River Plan/FEIS* is being completed in accordance with the National Environmental Policy Act (NEPA), including specific requirements for considering a range of alternatives, as well as requirements for impact analysis and public involvement. This document combines the Merced Wild and Scenic River planning with the analysis and evaluation required under NEPA. A full description of the planning process is outlined in this section.

Congress mandated the development of a comprehensive management plan for the Merced Wild and Scenic River with the addition of the river to the National Wild and Scenic Rivers System. This designation was based largely on public support for protecting the Merced River from dams or other water development projects. The National Park Service responded to this public and legal support for protecting the Merced River corridor by refining the boundaries, classifications, and Outstandingly Remarkable Values (ORVs) to serve as a management framework. Developed in a series of staff workshops in 1990-1993, the revised ORVs, boundaries, and classifications were published in the 1996 *Draft Yosemite Valley Housing Plan*.

The National Park Service initiated efforts to prepare a comprehensive management plan for the National Park Service segment of the Merced River corridor in early 1999. In July 1999, the decision resulting from a lawsuit over the reconstruction of the El Portal Road directed the National Park Service to complete a comprehensive management plan by July 2000. The *Draft Merced River Plan/EIS* released in January 2000 was a product of that effort. This final plan and environmental impact statement has been developed after analysis and consideration of public comments submitted during the public comment period from January 14 to March 24, 2000.



Planning Approach

The mission of the National Park Service is to “...conserve the scenery and the natural and historic objects and wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (39 Stat. 535).

The mission of the National Park Service is to both protect resources and provide for visitor enjoyment of those resources. Accomplishing both aspects of this mission is challenging given the increasing visitation of the parks and the resulting increased impacts to park resources. One tool the National Park Service has developed to assist with accomplishing both aspects of this mission is the Visitor Experience and Resource Protection (VERP) framework. VERP addresses user capacities, as required by the Wild and Scenic Rivers Act, in the context of protecting both resources and visitor experience (NPS 1997q).

Yosemite National Park management adopted the VERP framework in the development of the *Merced River Plan/FEIS* to address user capacities. During the development of the *Merced River Plan/FEIS*, the National Park Service completed the following elements of VERP:

- Assembled an interdisciplinary core planning team of Yosemite National Park staff and consultants
- Analyzed the park’s purpose and significance in light of the Merced Wild and Scenic River designation
- Developed goals, a list of issues to be addressed, and refined existing boundaries, classifications, and ORVs
- Initiated analysis of park ecosystems and visitor use information
- Described a range of prescriptive management zones to protect and enhance ORVs
- Applied these management zones to the Merced River corridor for each action alternative
- Committed to a monitoring process. This process will refine existing information and develop indicators and standards for natural and cultural resources and visitor experiences. It will serve to inform future management decisions and ensure that acceptable social and resource conditions are maintained. This monitoring process is the heart of the “user capacity” approach to park management and will help the park continue to protect and enhance the ORVs of the Merced River corridor.

Core Planning Team

The National Park Service assembled an interdisciplinary team of park staff who have experience in park planning as well



Photo by C. Jole

CONSULTATION AND COORDINATION

An interdisciplinary team of park staff prepared the Merced River Plan using existing data and field research.

as expertise in technical areas addressed by the plan (including natural and cultural resources, facilities management, interpretation, visitor protection, and concessions). Consultants with expertise in resource management, environmental compliance/planning, and public involvement assisted the core planning team (see Chapter VI).

Public Scoping and Communication

Public scoping was held between June 11 and July 30, 1999. The park issued several press releases to announce scoping (on May 19, June 3, July 1, and July 30) and sent a letter soliciting initial scoping comments to its general mailing (8,500 entries) and media (110 entries) lists. This letter was also posted on the park's web site (www.nps.gov/yose/planning). In addition, six public meetings were held in San Francisco, Modesto, Mariposa, Yosemite Valley, Wawona, and El Portal to solicit comments on issues to be addressed in the *Draft Merced River Plan/EIS*. Concerns raised by the public, park staff, and other agencies during this scoping process were analyzed and used to help identify many significant issues to be addressed in this plan.

During the planning process, the park also communicated with the public about the development of the *Draft Merced River Plan/EIS* through the newsletter *Planning Update* distributed to 8,500 recipients, and through the park's web site. In addition, park staff have been available to meet with area groups that have requested informational meetings and discussions.

Defining Goals and Issues

The core team developed goal statements based on both the *General Management Plan* and the Wild and Scenic Rivers Act to set the foundation for the *Merced River Plan*. They also developed a list of issues to be addressed through the plan. The issues were based on public scoping, staff concerns, and the results of ongoing research and observations in the river corridor. These goals and issues are presented in the following sections of this chapter.

Alternatives Development

Following the development of goals and issues, the core team prepared a series of alternatives that apply management zone prescriptions to each area in the river corridor. The alternatives vary in how they apply management zones and, in some cases, by using different boundaries, classifications, or other management elements. The Final Environmental Impact Statement was developed concurrently and as an integrated part of the *Merced River Plan/FEIS*. This allowed for opportunities to revise alternatives as negative impacts were identified.

After developing the alternatives, the core team evaluated and refined them. One tool used to assist in this process and in the selection of a preferred alternative is a method called "Choosing by Advantages" (CBA). The planning team used information learned during CBA analysis to improve the preferred alternative (Institute for Decision Innovations 1996).

The alternative identified and refined through this process is presented as the preferred alternative in the *Merced River Plan/FEIS*. The alternatives in this plan and environmental impact statement

have been evaluated with respect to potential impacts to natural resources, cultural resources, social resources, and visitor experiences.

Monitoring and Continued Management

Once approved in a Record of Decision, the *Merced River Plan* would establish ORVs, boundaries, classifications, and management zones (if one of the action alternatives is selected). These management elements would then be used to guide implementation plans now in place (such as the *Wilderness Management Plan*) and all future implementation plans affecting the river corridor (such as the *Yosemite Valley Plan*). Each of the action alternatives of the *Merced River Plan/FEIS* would implement the Visitor Experience and Resource Protection (VERP) framework. The VERP framework protects both resources and visitor experience from impacts associated with visitor use. During the implementation of the *Merced River Plan/FEIS*, the National Park Service would: develop and refine prescriptions of desired resource conditions and desired visitor experience; conduct scientific research necessary to identify and determine indicators and the standards associated with those standards; develop monitoring protocols for those selected indicators and standards; begin monitoring; and, take management action when the standards are violated. This framework would be used to inform management decisions over time. Existing data concerning visitor use are included in Appendix C. The specific steps of the monitoring process are described further in Chapter II, under “Merced Wild and Scenic River Visitor Experience and Resource Protection.”



Photo by S. Spofford

PROTECTING RESOURCES

Ongoing research and monitoring is one of the key management elements of the Merced River Plan.

Public Review, Analysis, and Comment

The *Draft Merced River Plan/EIS* was released for public review and comment on January 14, 2000. Public meetings on the draft plan were held in January and February throughout California. Written comments were accepted through March 24, 2000. The National Park Service received over 2,300 public responses, including testimony at public meetings and written comments submitted to the park. Responses to public comments are included as part of this Final Environmental Impact Statement. Following the evaluation of all public comments, the National Park Service prepared a final proposed action, which is presented to the public in this Final Environmental Impact Statement. The selection of a final action will be documented in a Record of Decision.

Management Goals

Goals identify long-range direction for the management of the river corridor. This management must carefully balance multiple goals, especially in a park as large, diverse, and complex as Yosemite National Park. This section presents the goals from Yosemite's *General Management Plan* and a summary statement for each goal as applied to the *Merced River Plan*. This is followed by a set of goals specifically developed for the *Merced River Plan*.



NATURAL SYSTEMS

Reclaiming priceless natural beauty requires the preservation of the river's natural processes, including its ability to shape its own course.

General Management Plan Goals

The *General Management Plan* for Yosemite National Park sets forth five broad goals for management of the park as a whole. These goals are also applicable to the management of the Merced River corridor under the *Merced River Plan*.

Reclaim Priceless Natural Beauty

The Merced Wild and Scenic River is a vital component of Yosemite National Park, a park recognized worldwide for its unique, scenic grandeur. The main stem of the river connects the wilderness to Yosemite Valley, where the river meanders through meadows and woodlands, and continues on a canyon-carving descent through El Portal. The South Fork flows from mountainous wilderness areas through the historic town of Wawona, into foothill canyons to its confluence with the main stem. The priceless natural beauty of the river corridor should be protected and enhanced for today's visitors and future generations.

Allow Natural Processes to Prevail

The natural processes of the Merced River corridor sustain many biological communities, such as meadows, riparian areas, and aquatic habitats. Some processes, such as hydrology, have been altered by historic and current land-use patterns. The Merced River should be protected and further restored to its free-flowing condition, allowing the natural processes that have shaped the Valley to continue.

Promote Visitor Understanding and Enjoyment

Interpretation and education programs are valuable in enhancing visitor enjoyment and increasing understanding of the natural processes and events that have shaped the park. Interpretive programs also help instill a sense of respect and responsibility for the natural and cultural environment in the park and beyond. Visitors should be encouraged to engage in the resource-based recreational and educational opportunities available along the river.



NPS Photo

Markedly Reduce Traffic Congestion

Traffic congestion that occurs in the Merced River can affect some of its

Outstandingly Remarkable Values, such as enjoyment of the natural river environment. Providing visitors access to the river while protecting and enhancing the condition of the corridor's natural and cultural resources requires careful planning and design of circulation and transportation facilities. Where applicable, the *Merced River Plan* should contribute to reducing traffic congestion by guiding subsequent plans that address road locations and facilities, parking areas, turnouts, and other related issues.

Reduce Crowding

The popularity of national parks such as Yosemite continues to grow. During peak visitation periods, crowding can diminish visitors' experiences and may contribute to degradation of resources along the river. Where applicable, the *Merced River Plan* should contribute to subsequent planning that would manage crowding through careful design, relocation, or removal of specific facilities, setting use limits, dispersing visitor impacts, and establishing other measures to protect both the diversity of visitor experiences and the resources of the river corridor.

PROMOTING VISITOR ENJOYMENT

Interpretive programs can foster an understanding of river processes and a sense of stewardship for the river.

Merced River Plan Goals

The following goals have been developed specifically for the *Merced River Plan*. They are consistent with Yosemite National Park's *General Management Plan* goals and comply with the policy of the Wild and Scenic Rivers Act to preserve designated rivers in their free-flowing condition. These goals are intended to protect and enhance the Outstandingly Remarkable Values of the Merced River.

Protect and Enhance River-Related Natural Resources



PROTECTING AND ENHANCING

Boardwalks are constructed across meadow communities to provide trail access without inhibiting groundwater and surface water flow that is essential to a meadow's health.

The Merced River contains diverse biological communities that have experienced varying levels of human disturbance. The natural function of riparian areas, wetlands, and floodplains of the Merced River should be maintained and restored. Restoration activities should strive to return habitat to natural levels of complexity and diversity. Water quality should be maintained at the highest possible levels.

Protect and Restore Natural Hydrological and Geomorphic Processes

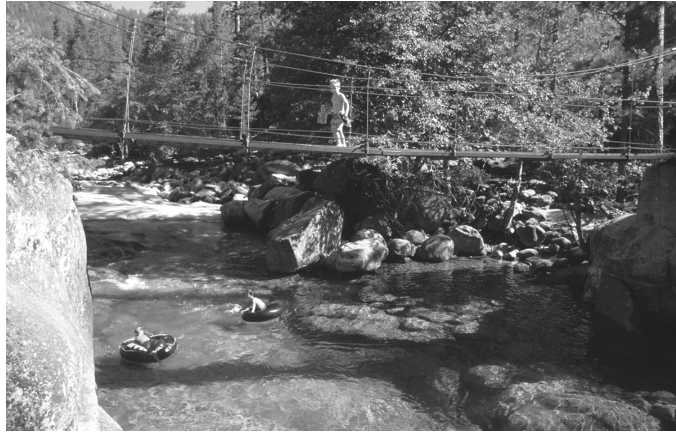
The Wild and Scenic Rivers Act is intended to preserve the free-flowing condition of designated rivers such as the Merced. The hydrologic processes of the Merced River, including natural flood cycles, channel dynamics, and interconnection of ground and surface water systems, have been altered by historic and current land use patterns. Restoration and management activities should redirect visitor use and facilities that are causing unacceptable impacts to the river system.

Protect and Enhance River-Related Cultural Resources

The Merced River has been inhabited for thousands of years, and evidence of this history, including historical and archeological sites, remain today. These cultural resources should be cherished and maintained as important links to the human history of the Merced River. Archeological, historic, and cultural sites and landscapes are also part of the living tradition of resource stewardship for culturally affiliated American Indian people.

Provide Diverse River-Related Recreational and Educational Experiences

The Merced River is a valuable recreational and educational resource for visitors from around the country and the world. The river should provide opportunities for enjoyable and educational experiences with the river's natural and cultural landscapes. People with diverse interests and expectations should be able to find a broad spectrum of opportunities, from options for solitude and quiet to group activities. Appropriate access to the river should be provided; recreational facilities should be designed and sited to



SWINGING BRIDGE, WAWONA

Appropriate access to the river should be provided, particularly in areas able to withstand high levels of use.

Provide Appropriate Land Uses

To enable the many visitors to the park each year to enjoy and learn about the Merced River's Outstandingly Remarkable Values requires efficient, safe, and appropriate land uses, including both visitor service and administrative facilities. These facilities should be sited in locations able to withstand high levels of visitor use. Existing and future roads should be constructed and maintained for safety, while protecting the free flow of the river and the ORVs.

Issues and Concerns

The following issues were developed from concerns raised during the public scoping process and from National Park Service staff. The first set of issues, “Issues Addressed in the *Merced River Plan/FEIS*,” includes only those issues that concern overall management direction, not specific management actions, since the *Merced River Plan* will be a general management-level policy plan. The second list, “Issues Not Addressed in the *Merced River Plan/FEIS*,” includes issues that are addressed in other park plans and those that are beyond the scope of this plan, either because they are too detailed or because they are outside the scope of the Wild and Scenic Rivers Act.

Issues Addressed in the Merced River Plan/FEIS

Natural Resources

Geomorphology/Hydrology. Structural alterations to the Merced River and its tributaries, such as bank stabilization, bridges, dams, diversion walls, utility lines, and other obstructions, have affected the river’s free-flowing condition over time.



Photo by Fred D. Grande

PATTY’S HOLE, EL PORTAL

In some areas, free flow is disrupted when banks of the river are stabilized to protect facilities that provide access to the river corridor.

Facility development and heavy visitor use in the river corridor can disrupt the functional relationships between river and upland communities for aquatic, riparian, and terrestrial habitats for plant and wildlife species. Facilities and use can disrupt flow between groundwater and surface water.

Concentrated visitor use along the river has resulted in the loss of riparian vegetation due to trampling. This has led to destabilization of riverbanks, releasing sediment into the river and altering the shape of the river.

Wildlife and Plant Habitat. The Merced River corridor supports diverse aquatic, and riparian habitats for plant and wildlife species. Many of these habitat areas have been degraded by decades of human use. This has resulted in considerable impacts on plant and wildlife species. Examples include:

- Past and present alterations to the river flow have encouraged the establishment of non-native plant species, changing the community composition and interaction between river, plants, and wildlife.
- Development of roads and trails and the siting of facilities in the river corridor have fragmented and disrupted wildlife travel corridors.

Aquatic Habitat. Water pollution from multiple sources (such as road runoff, improper human waste disposal, auto emission deposition, and stock use) has affected the health of aquatic habitats in the Merced River. For example, the long-term policy of removing fallen trees and organic debris from the river in Yosemite Valley has degraded natural aquatic habitat.

Non-native Species. The introduction of non-native species can threaten the viability of native species, particularly rare, threatened, and endangered species. Examples include non-native bullfrogs displacing native red-legged frogs, the introduction of fish into higher-elevation waters that were naturally free of fish, and hatchery-raised trout and non-native trout species displacing indigenous trout populations. Introduced brown-headed cowbirds have encroached on native bird species. Non-native plants threaten native vegetation that comprises the cultural landscapes. These native species are also essential to the continuing cultural traditions of local American Indian people.



Photo courtesy of Yosemite Museum

REMOVING NON-NATIVE VEGETATION

The threat that non-native species, such as star thistle, poses for meadow vegetation has been recognized and addressed for decades.

Water Quality. Raw sewage is pumped out of the Valley to a treatment plant in the El Portal Administrative Site; sewage spills have the potential to threaten water quality. The Merced River provides drinking water to Wawona, the Merced Lake High Sierra Camp, and the Vernal Fall area. Recreational use of the river results in the introduction of bacteria into the water where humans come into contact with the water and increase in water turbidity where the riverbank of the river bottom is disturbed.

Surface Water Loss. Surface water withdrawal (e.g., irrigation of the Wawona Golf Course) has reduced the water available for aquatic habitats.

Low Water Table/El Capitan Moraine. The meadows in Yosemite Valley rely on high water tables, within 2-3 feet below the surface, particularly at the end of the growing season. In 1879, the El Capitan moraine was lowered (NPS 1992c), affecting the ecological processes of nearby wetlands and meadows. Water tables have also been lowered by remnant mosquito-abatement ditches from earlier eras and by roads and structures that divert natural water flows. The subsequent lowering of water tables has hastened conversion of meadows to upland vegetation (woodland and shrubland).

Air Quality. Yosemite National Park is a Class 1 airshed (under the Clean Air Act) and, therefore, must maintain the highest standard of air quality. This standard may occasionally be threatened by sources inside the park, such as vehicle emissions, fugitive dust, campfires, wood

stoves, fireplaces, wildland fires, and from many sources outside the park. Lower air quality may also detract from scenic views along the river corridor.

Cultural Resources

Archeological Sites. As home to American Indians for thousands of years, the Merced River corridor is rich with archeological sites, both historic and prehistoric. Prehistoric sites are important for their research value and as a tangible link to the heritage of culturally associated American Indian people. Historic sites can provide information important to understanding past land use and management. Over the years, some of these sites have been eroded by river meandering or covered by river sediments. Visitor use and facilities along the riverbanks have impacted many of these sites. Some historic archeological sites, such as dumps, have been exposed; while these have scientific and interpretive value, they also pose environmental and public health hazards.



MAGGIE "TABUCE" HOWARD

Local American Indian people continue to utilize the river corridor to gather plant materials traditionally used for food, in basketry, and for ceremonies, though access has become more difficult.

Ethnographic Resources. Yosemite National Park is part of a living tradition for local American Indian groups. Many places along the river corridor are important for traditional cultural uses and practices, including the gathering of plant materials for food, basketry, and other uses, and conducting traditional ceremonies. Many of these places and access to them have been affected by visitor use and park development.

Historic Structures and Cultural Landscapes. Historically significant structures and landscapes exist throughout the Merced River corridor. Some of these structures lie in the floodplain and risk potential damage in the future. Conversely, the location of these structures in the floodplain affects the free flow of the river. For example, many of the historic bridges in Yosemite Valley constrict river flow and cause scouring of the riverbed and erosion of adjacent riverbanks. Protecting the free flow of the river must be weighed against the preservation of significant historic resources. Some cultural landscape features that date from historic times represent homesteading and early tourism; these

include physical modifications to the river system, such as drainage ditches and dams. (See also the issue "Conflicts Between Protection of Natural Landscapes and Cultural Landscapes.")

Land Development and Facilities

Development in the 100-year Floodplain. There are numerous administrative and visitor-serving facilities located in the 100-year floodplain in the river corridor. This placement puts facilities at risk of flood damage and, depending on the location and type of facility, can negatively affect the natural resources of the river corridor. The *General Management Plan* calls for the relocation and/or removal of many of these facilities. Protecting the river corridor and the facilities themselves must be weighed against the cost and potential impacts of relocating facilities.

Roads. There are many roads adjacent to and near the Merced River. While the Wild and Scenic Rivers Act does not preclude roads in the corridor, the paving and bank stabilization necessary for safe travel and road maintenance can adversely affect the free-flowing condition of the river and damage riparian communities. This plan provides overall guidance for road projects that may affect the river corridor.

Parking. Measures may be necessary to manage transportation systems in order to support the park's overall efforts to reduce traffic congestion, crowding, and associated experiential and resource impacts. Roadside parking provides informal recreational access to areas used for such activities as swimming, fishing, and rafting, but such uses can potentially damage riverside vegetation and habitat.

Bridges. Bridges provide convenient visitor access to and across the Merced River and offer important viewing locations. Some bridges along the river corridor are historic resources; however, bridges can cause channel restriction and scouring of the riverbanks. (See also the issue of "Historic Structures and Cultural Landscapes.")

Utilities. Utilities such as water, sewer, electric, and telephone lines in the river corridor can adversely affect free flow of the river.

Visitor Experience

Views. The Merced River offers beautiful views of the river itself and of the surrounding landscape. Vehicle turnouts at key points along roads provide an opportunity for visitors to enjoy these views. However, turnouts require additional road width and often lead to the evolution of informal trails that can in turn adversely affect plant and animal habitats along the river corridor. Parking at these turnouts also detracts from the outward views from the river corridor.

Trails. Trails provide visitor access to and along the river, but can also lead to resource impacts. The use of the same trails by people involved in different activities (such as hiking and horseback riding) may result in conflicts that detract from the quality of the recreational experience.

Comparable Access. The National Park Service is required under the Rehabilitation Act of 1973 and the Architectural Barriers Act of 1968 to provide access to comparable experiences for visitors of all physical abilities. Providing for visitor use is also a mandate from the National Park Service's 1916 Organic Act. It is challenging to meet these standards in a river environment that

consists of varying terrain, and in a way that does not degrade the Outstandingly Remarkable Values of the Merced Wild and Scenic River.

Climbing Access. Rock climbers have requested continued access to climbing routes in the Merced River corridor. Providing access to routes must be weighed against protection of the river corridor's aquatic, riparian, and terrestrial communities.



NPS Photo

WOODY DEBRIS

Rafting is very popular in Yosemite Valley and less so in Wawona. But leaving fallen trees in the channel—necessary for the river's health—poses potential risks.

Non-motorized Watercraft. There is considerable demand for non-motorized boating access to the river, and many visitors view floating on the river as a significant part of their experience in the park. However, safe boating often requires a waterway free of natural obstructions such as fallen trees. Rafting, inner-tubing, and kayaking can lead to degradation of the river itself, the riverbank, and riparian vegetation. Impacts include increased sedimentation, litter, and fecal pollutants; loss of habitat for aquatic species, of shade, leaves, and woody debris due to reduced river-edge vegetation; and impacts to natural sounds and scenery. These impacts can be concentrated at specified launch and removal points, but they occur to a lesser extent along all portions of the river where rafting is permitted. Boating activities can also lead to conflicts with other users, such as people fishing, taking photographs, or swimming.

Camping. Camping along or near the river is an experience sought by many visitors to the park. While this is compatible with the recreational values of the

river corridor, such use can negatively affect natural and cultural resources. Issues to be resolved include the extent to which camping should be accommodated in the river corridor, and what kinds of campsites (tent, recreational vehicle, drive-in, walk-in) would be appropriate.

Wawona Golf Course. A small portion of the Wawona Golf Course falls within the Merced River corridor. The golf course is owned by the National Park Service but operated by the park's primary concessioner. First opened in 1918, it is considered an important part of the Wawona cultural landscape. It is also used as a sprayfield for reclaimed water from the Wawona wastewater treatment facility.

Conflicts Between Uses and Users. The National Park Service must determine the appropriateness and importance of potentially competing values and visitor uses. Areas of potential conflict include the following:

- Automobile-based touring and associated roads and parking can detract from the experience of solitude and natural quiet.
- Bicyclists, hikers, and stock users can interfere with each other's use of the same trails or multi-use paved trails.

- Fallen trees in the river are beneficial for wildlife habitat and hydrological process, but can be dangerous for boaters, swimmers, and waders.
- Campgrounds and lodging facilities allow for valued overnight experiences along the river corridor, but may detract from views and degrade surrounding vegetation and wildlife habitat.
- The National Park Service faces increasing workload due to growing visitation, but lacks administrative facilities for additional resource protection and visitor services.

Health and Safety. The National Park Service strives to protect visitors from natural hazards while maintaining opportunities for high-quality visitor experiences. Health and safety measures should be designed in such a way as to neither restrict natural processes nor impose on the natural setting. Within wilderness, however, National Park Service policy regarding visitor use and facilities states that the risks of wilderness travel must be accepted as part of the wilderness experience.

Other Issues: Planning Processes, Management, and Operations

Conflicts Between Protection of Natural Landscapes and Cultural Landscapes. Protection of one type of resource can sometimes include actions that may be detrimental to the condition of other resources. For example, restoring the free-flowing condition of the Merced River may require rehabilitation of the shoreline adjacent to historic structures, affecting the natural resource components of cultural landscapes, archeological sites, and, in some cases, may require rehabilitation or removal of some historic bridges that create severe scouring of the river channel.

User Capacity and Baseline Data and Monitoring. The Wild and Scenic Rivers Act requires that comprehensive management plans address user capacity issues to ensure quality visitor experiences and resource protection. The National Park Service is continuing to conduct scientific inventories and research related to visitor experiences and resources. These data can be used to develop indicators and standards as well as long-term monitoring techniques. Monitoring efforts for the Merced Wild and Scenic River should also be coordinated with parkwide research and monitoring programs.

Private Property. There are private parcels adjacent to and within the park boundary. The National Park Service must develop management direction in regard to these properties. Coordination and communication can reduce or avoid potential conflicts with private owners. Specific private properties include the following:

- **Yosemite View Parcel.** The National Park Service is in the process of negotiating a land exchange with a private landowner in El Portal who seeks additional space for lodging facilities. In addition, this exchange may provide the National Park Service with needed space that could be used for a future park entrance gate and vehicle turn-around site. National Park Service lands proposed for exchange contain one prehistoric archeological site and valued natural resources.
- **In the town of Wawona within an area known as Section 35,** the National Park Service goal is to harmonize the *Wawona Town Planning Area Specific Plan* with National Park Service management to preserve and enhance the river's Outstandingly Remarkable Values and its free-flowing condition. The Wawona plan defines land-use designations that are generally compatible with river corridor protection as follows: (1) Floodplain District, which excludes

new development in the floodplain; (2) Environmental Protection District, which limits development in resource-sensitive areas; and (3) Mountain Residential District and Limited Commercial District, which allow for development in designated areas.

- In the unincorporated areas, the National Park Service should make an effort to make the Mariposa County General Plan consistent with the constraints of the Wild and Scenic Rivers Act and other applicable laws and policies.

Coordination. The *Merced River Plan/FEIS* is being developed on a schedule that overlaps with other existing plans and planning processes. Coordination with these other plans and park regulations is essential. This scope includes both park-planning efforts, such as the *Final Yosemite Valley Plan/SEIS*, which will be guided by the *Merced River Plan/FEIS*, and non-park efforts, such as the existing comprehensive management plans for the Merced Wild and Scenic River completed by the U.S. Forest Service and Bureau of Land Management.

Public Involvement. Comments and participation of the general public, local communities, visitors, park partners, and others are important in the formulation and refinement of this plan. Cooperative, collaborative relationships with these parties will help ensure the protection and enhancement of the river corridor.

Public Controversy. The *Merced River Plan* and future river management implementation actions will take place in a context in which all park actions will come under close scrutiny and possible opposition. This arises from public concerns about the impacts of projects such as the El Portal Road Improvement Project, and the broader relationships between management of the river corridor and management direction for the park as a whole.

Concessioners/Park Partners. The park's management of natural and cultural resources and visitation can have significant impacts on the economic viability of concessioners and other park partners.

Gateway Communities. The park's management of natural and cultural resources and visitation can have significant impacts on the economic viability and well-being of gateway communities.

Issues Not Addressed in the Merced River Plan/FEIS

The following issues are not addressed directly in the *Merced River Plan/FEIS* for one of two reasons: (1) the issue is addressed by other plans, either completed or in progress; or (2) the issue is beyond the scope of the Wild and Scenic Rivers Act.

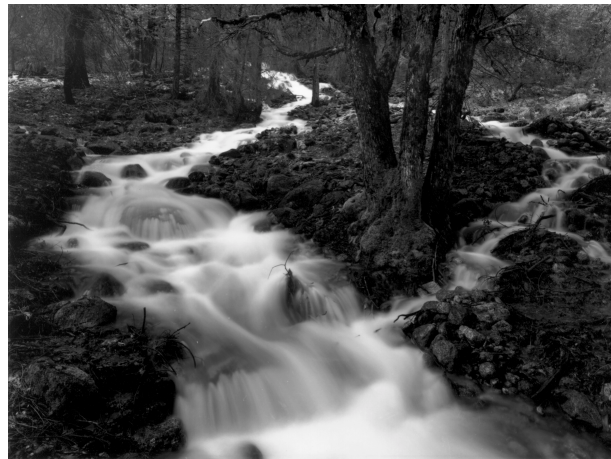
Fire Management. The National Park Service is attempting to reintroduce historical fire regimes as part of an ecological restoration and fuels management approach. The park faces the challenge of balancing fire and fuels management with public safety, air quality, and visual experience values.

Reason for omission: These issues are being addressed under the *Yosemite Fire Management Plan*, which is currently being revised.

El Portal Road (Segment D). Improvement of the El Portal Road from El Portal to Pohono Bridge began after the January 1997 flood. Work on the easternmost segment of the road was

halted by the National Park Service before roadwork began due to an unacceptable design. Further work was later enjoined by a lawsuit. This segment, known as “Segment D,” includes the area between the El Portal Road/Big Oak Flat Road intersection near the Cascades Diversion Dam, and Pohono Bridge at the west end of Yosemite Valley. Planned work for the last segment included roadbed widening and reconstruction, bank stabilization, turnouts, guard-wall reconstruction, turning lanes and sight distance safety improvements at the intersection, and rehabilitation of the existing sewer line running beneath the road. Documentation of environmental compliance has been prepared and submitted for public review as part of the *Draft Yosemite Valley Plan/SEIS*. This compliance documentation was consistent with the Wild and Scenic Rivers Act and National Environmental Policy Act. The National Park Service faces a challenge in meeting the need for a safe, all-season road with sufficient capacity for visitors and utility lines, together with protection and enhancement of the Outstandingly Remarkable Values of the Merced River corridor.

Reason for omission: Providing detailed guidance on road design for a specific road—the El Portal Road or others—is too detailed an issue for this document. The *Merced River Plan/FEIS* provides a framework to ensure that all road-building and maintenance activities are completed in such manner that they do not degrade the free-flowing condition of the river or Outstandingly Remarkable Values of the Merced Wild and Scenic River corridor. The cumulative impacts analysis in this document includes Segment D in the discussion of the *Yosemite Valley Plan* as a reasonably foreseeable future action.



NPS Photo by James Shull

“The expedition under Gabriel Moraga, including the diarist Fray Pedro Muñoz, crossed the river in the San Joaquin Valley and named it El Río de la Nuestra Señora de la Merced on September 29, 1806, five days after the feast day of Our Lady of Mercy.”

“Merced River” from *Yosemite Place Names* by Peter Browning

Merced Lake High Sierra Camp.

Merced Lake High Sierra Camp is located within an area designated as a potential wilderness addition by the California Wilderness Act. This designation is used for areas where an incompatible use, such as lodge, precludes full Wilderness designation. Congressional direction for potential wilderness additions is that they be managed as near as possible as wilderness, and shall be designated Wilderness when the incompatible use should cease. The camp provides a unique opportunity for some users and can be an important part of their wilderness experience. Impacts of the camp on resources are related to existing development (e.g., habitat fragmentation) and visitor use (e.g., visitor induced erosion, noise).

Reason for omission: The management direction for the Merced Lake High Sierra Camp, including its potential addition as designated Wilderness if its use as overnight lodging is discontinued, will be addressed in the future revision of the *Yosemite Wilderness Management Plan*.